

# CHAMBERS' EDINBURGH JOURNAL

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS, EDITORS OF 'CHAMBERS'S INFORMATION FOR THE PEOPLE,' 'CHAMBERS'S EDUCATIONAL COURSE,' &c.

No. 236. NEW SERIES.

SATURDAY, JULY 8, 1848.

PRICE 1½d.

## A TRIP TO THE WYE AND SOUTH WALES.

We had lately the pleasure of making a flying visit to the West of England and a portion of South Wales. Devonshire, as far as Torquay, we tried in the first place; but repelled by the humidity of the climate, we were fain to seek sunshine, and a dry atmosphere, on the green and picturesque banks of the Wye. No man who has not been in Herefordshire can be said to have seen England; but to be seen rightly, it should, if possible, be visited in May, when the blossom of its orchards, and the rich green of its meadows, present the effect of a universal garden. Not only is the country beautiful in itself, but its approaches are charming. What a fine thing is the long winding vale of Stroud, with its sprinkling of white cottages among the trees, and fields to the tops of the hills—a scene in which is happily blended manufacturing industry with rural imagery! Through this vale a branch of the Great Western carries us onward to Gloucester, where we bid adieu to the rail, and take to coach travel.

I had been several times in Gloucester previously, but had not, till now, an opportunity of visiting the cathedral. It is a building whose antiquity carries us back to the days of the West Saxons, and unites in its style the rounded with that of the lighter and more fanciful Norman arch. Like most of the English cathedrals, it suffered by the civil wars, and much of its finer ornamental work is irretrievably destroyed. Latterly, the interior has been trimmed a little; and its monuments seem to be safe from further depredation. By far the finest thing about it is the cloisters. These form a quadrangular covered walk, entire as it was left by the pre-reformation clergy; and as such, I believe, it is unique in Britain. No archæologist should pass through Gloucester without seeing these famed cloisters. Beneath the choir of the cathedral there is a mortuary chapel, similar to that under the cathedral of Glasgow. Here we walk in crepuscular aisles among heavy rounded pillars, shortened by the accumulation of damp earth under foot. The large and dismal vault, which admits of restoration to at least a condition of decent cleanliness, is at present employed as a receptacle for skulls, ribs, leg bones, and other fragments of mortality, thrown up from the graves in the adjoining churchyard. It is a horrible sight. In one heap, I should think, there could not be fewer than twenty cart-loads of bones. The English are a curious people. What an uproar they make when a clergyman refuses to perform a funeral service at the entombment of their relations—with what indifference do they see and hear of the grubbing in graveyards, and of supra-terrestrial accumulations of mortality like the present! Perhaps the exhibition I am speaking of helps to make up the show of the cathedral, and renders it more worthy of

the two shillings, per tariff, which our party of four had to pay for admission.

Gloucester is rising as a port for shipping, by means of a large canal, connecting it with the Bristol Channel; it is also becoming a considerable centre for railway traffic. When the railway to Hereford is completed, the upper Wye may be easily reached by tourists. To carry us westward to Ross, we procured an open chaise, and favoured by the finest weather, soon reached our destination, sixteen miles distant—intermediate country undulating and beautiful. Ross, where we remained a day, occupies a knoll on the left bank of the Wye, and with its church spire, antique gables, and one or two fancy turrets, forms a pleasing object in the landscape. The interior of the town is mean and irregular, and its lanes would make up a first-rate case for sanitarians. Alas, John Kyrle, thy good deeds, though inspiring Pope, have failed to inspire thine own townsmen! And is it not something of a shame to this prettily-situated town, with its vast capabilities for improvement and purification, that no new 'Man of Ross' should have arisen to emulate the efforts of him from whom it derives its only claim to celebrity?

At Ross, we took up our quarters at Barrett's Hotel, the situation of which, on the high ground overlooking, on the west, the windings of the Wye, it would not be easy to match: the green sylvan country spreading away in hill and plain; the clear river beneath mirroring the blue sky and its thin feathery clouds; the lazy movements of a boat in which is a party of pleasure; the Paul-Potterish herd of cattle browsing on a meadow beyond; the villas and hamlets embosomed in trees—all compose a picture genuinely English. But still more English are the tastefully-laid-out grounds of the hotel, with their rockery, trim paths, greenhouse, patches of flowers, and commodiously-placed seats—on one of which we are enjoying the balmy evening air, and watching the great broad sun as he prepares to descend among the Welsh mountains. Adjoining these grounds is the churchyard of Ross, and by a pathway in that direction are found some pleasing walks across fields and along shady lanes—all equally English.

Down the Wye, four miles from Ross, and on the opposite side of the river, is situated Goodrich Court, the handsome seat of the late Sir Samuel Meyrick, and noted for its collection of armour and other objects of antiquity. Near it, on the top of a crag overhanging the Wye, is the ruin of Goodrich Castle, which was bombarded and destroyed during the civil wars, after a long and gallant defence by the Cavalier party. The view towards Ross from the summit of the ancient keep, to which we clambered, is one of the best points on the river. Below Goodrich, the banks of the Wye improve in picturesque beauty; and at one place they

rise into tall cliffs, richly decorated with natural foliage. From this to Monmouth is perhaps the finest part of the Wye. Following the carriage-road, and crossing the river at Monmouth to the high grounds on the south, we had some superb prospects, rendered additionally interesting from the many elegant mansions which here and there reposed in the bosom of the wooded banks. Seduced by a local guide-book, we proceeded three miles in a southerly direction from Monmouth in quest of a Druidic rocking-stone, which was said to stand on the summit of a conspicuous height in Dean Forest. Truly enough, after a pedestrian tramp to the top of a hill, escorted by a troop of juvenile lazzaroni, we reached the so-called rocking-stone, which in three minutes we discovered to be no rocking-stone at all, though sufficiently like one to form a subject of local wonder. It consists of a huge unshapely mass of a softish conglomerate, about twelve feet in height, slopingly resting, by a base of three feet, on a rock of the same material. The whole, in fact, is immovable, and but one rock, as is observable from the stratification; and the form of a rocking-stone has been given only by the abrasion of the weather. A few more winters, and the point of rest will crumble away, causing the incumbent mass to go thundering down the hill over which it impends. As the public road is beneath, we cannot admire the temerity which leaves such an engine of destruction in its present precarious position. What mythic legends and stories are told of this rocking-stone, which assuredly never rocked since the creation! Geologically, the stone is curious.

Having on a previous occasion seen the lower part of the Wye, with Tintern Abbey and Chepstow, we had no wish on the present occasion to go further down the river; and so, returning to Monmouth, we proceeded thence by the pretty vale of Crickhowel to Abergavenny and Bwch. We were now in South Wales, and spent a few pleasant days in rambling about Brecknockshire and part of Radnorshire—country all beautiful; green hills and glittering waters; old moss-grown churches; hamlets, and villages, not over-tidy; and plenty of toll-bars, all the reformatory doings of Rebecca notwithstanding.

From Brecon, a substantial county town, with a large military barracks, we crossed the hills in a southerly direction to Merthyr-Tydvil, a distance of twenty miles. On reaching the culminating point, and dropping down into the valley of the Taff, we found ourselves in a new world. The green wooded region of Brecknockshire, with its placid life, is exchanged for bare pastoral heights and valleys, filled with the ashes, smoke, and tumult of a Pandemonium. Merthyr may be called the centre of those great iron-works in Glamorganshire and adjacent counties which threaten to alter the character of South Wales—transforming a thinly-peopled country, with primitive habits, into a species of Lancashire; a Lancashire, however, without the intellectual qualities which distinguish that scene of English industry.

Everybody is recommended to visit Merthyr for the first time at night, when its furnaces, vomiting forth fires, are seen to the best advantage. We came upon the town in daylight, but having remained over-night, and seen the place at various striking points, nothing was left for us to regret. Situated in the higher recesses of a valley, which stretches southwards to Cardiff on the Bristol Channel, there never would have been a town here but for the discovery of coal and iron in the huge bare hills from which are gathered the waters of the Taff. In an early period of British history, a Welsh prince, it seems, here erected a church to the honour of Tydvil the Martyr, and hence Merthyr-Tydvil. This edifice modernised was, till lately, the only established church in the town. Stretching up the valley from the old church, and pinched as to standing-room, the town has grown and spread till it has reached the higher uplands; the only apparent principle guiding its movements being an attrac-

tion towards the iron-works which have from time to time sprung up. Everything great in this world has had small beginnings, and so has Merthyr. Centuries ago, the adjoining hills were discovered to contain iron ore, which was dug and smelted with charcoal. This was of course done on a small scale, but not so small as to save the woods from destruction. When all the timber which adorned the mountain sides was cleared away, it was discovered that iron ore could be smelted by coal; and there, in exhaustless abundance, lay strata of this useful fossil in the same hills as the iron. Now commenced the true Iron Age. In 1755, or thereabouts, smelting was begun on a tolerably large scale; and in the present century, it has been extended so as to include four establishments—the Cyfarthfa, Plymouth, Pen-y-Darren, and Dowlais works. Taking my statistics from 'Cliff's South Wales'—one of the best local guides I have seen in England—the census return of Merthyr in 1831 was 22,083; in 1841, 34,977; and it is believed that in 1847 it was at least 45,000!—a vast population to be dependent less or more on four establishments. 'In 1847,' says the same authority, 'the place is in a state of the highest prosperity. There are now four iron-works in operation—namely, the Dowlais works of Sir J. Guest and Company, at which there are nineteen blast-furnaces; the Cyfarthfa works of Messrs Crawshaw and Sons, at which there are thirteen furnaces; the Pen-y-Darren works of Messrs Thompson and Company, at which there are six furnaces (this firm possesses two other large iron-works); and the Plymouth works of Messrs Hill, at which there are eight furnaces. There are always some furnaces out of blast. Messrs Crawshaw also possess the Hirwain works, six miles from Merthyr, at which there are four furnaces.' At Aberdare, in a valley extending from a lower part of the Taff, there were eight furnaces, and more were in course of erection.

From anything I could learn, the iron-masters are not proprietors of the hills from which they dig their ore and fuel. They are, I believe, holders of long leases of their respective tracts of country; and the expiry of these temporary holdings forms a serious social crisis in Merthyr. A short time ago, the lease of the lands held by the Dowlais Company expired; and the Marquis of Bute, as proprietor, not readily inclining to a renewal satisfactory to the other party, for some months the works were almost suspended, to the consternation and suffering of several thousand workmen and their families. At length, after a period of lamentable privation, the contracting parties came to an amicable settlement, and the intelligence of the event was hailed with the ringing of bells and other demonstrations of universal delight. What a critical state of society does this circumstance reveal! Reckoning men, women, and children, upwards of twelve thousand beings depending for their daily bread on the uninterrupted working of one establishment! Three thousand pounds paid weekly in wages by one company! Conceive all the four concerns stopped! We hope this is not a probable contingency.

With a small proportion of shopkeepers and tradesmen, Merthyr is nearly altogether a town of working people, the bulk of the houses being inhabited by persons engaged either in the mines or iron-works. It has a few police, but no corporate magistracy to exercise the usual and necessary functions of local government. Till I visited Merthyr, I had been in the belief that the Scotch were pre-eminent in dunghills; now my opinion was shaken. Not troubled with any compulsory arrangements to insure health or cleanliness, and there being to all appearance no superior intellects to project and execute schemes of improvement, the town is very badly kept, and in some of the back lanes, crowded with inhabitants, the heaps of refuse rise to enormous dimensions. But unpaved and dirty thoroughfares are not half so melancholy a spectacle as a dirty river. God has given mankind pure sparkling streams, and how much like a desecration

is the transforming of these living waters into a polluted gutter. Few rivers have so much reason to complain of misusage as the Taff. At Merthyr, where it ought to perform a useful sanitary function, it is an opaque dirty mass; and this dirtiness never leaves it till it pours, after a course of twenty miles, into the sea. Rinsings of coal and iron mines, and sundry torturings in the movement of machinery, are, it will be conjectured, the cause of this appearance. Besides these unpleasant sights, there is one more class of objects which help to destroy the picturesque in Merthyr. Up and down the vale, and crowding on the town as if about to bury it, are seen huge banks of black cinders and debris, the refuse of the furnaces and mines, locally called *tip*. Wheeled out by tramways, and continually extending its bounds, the tip is gradually covering the face of every hill and field. Green meadows and hedgerows are disappearing under the gloomy embankments; everywhere the heaps of black sterile tip wrap nature in an everlasting shroud.\*

We visited, and were conducted over, the Cyfarthfa works, close to the town; and also the Dowlais works, which are situated at a distance of two miles above—nearly the whole way to the last-mentioned being lined with workmen's dwellings. The operations need no particular description. The only thing new to me was the hot-blast apparatus. Instead of cold air being blown into the furnaces, as was till lately the case, a powerful steam-engine is employed to force air into a species of oven, where, being heated to a high degree, it proceeds through pipes into the furnaces, by which greater efficacy is given to the process of smelting and working the rude masses of metal. From ore to the finished manufacture, the iron goes through several stages, the last thing done being to draw it into shape between grooved rollers. Bar iron, long rods for nails and bolts, and rails, are among the articles produced. The making of a railway rail, from the time it is a rough mass till it is drawn out and laid on the floor finished, costs only two or three minutes. Half-dressed, with begrimed perspiring faces, each handling a pair of long pincers, or toiling with long pokers in the fiercely-blazing furnaces, the men employed at these works labour with a diligence which seems to be almost supernatural. It is a dreadful struggle, too exhausting to be long sustained, and therefore relays of men shift every six or eight hours. 'The make of blast-furnaces,' says the authority already quoted, 'varies greatly, according to circumstances, and according to the quality of iron produced. Thus a furnace that will make 120 tons of forge iron, is not capable of producing more than sixty-five tons of foundry iron. The average make of pig-iron at Dowlais, where no foundry iron is made, amounts, we believe, to between 80,000 and 87,000 tons per annum; the average make of pig-iron at Cyfarthfa and Hirwain somewhat exceeds 60,000 tons.' Staffordshire and Scotch iron are imported to a small extent, to be used in some instances as a mixture. No iron is produced fit for cutlery or tools; all is of a coarse nature. At Dowlais, I was informed that the consumption of coal amounted to 1700 tons daily. Mr Cliff gives the following statement as to wages in 1847:—'Colliers earn from L.3 to L.5, 10s. per month, averaging about L.1 per week; miners earn about 18s. per week; furnace-men at the blast-furnaces, 20s. to 30s.; finers and puddlers, from 25s. to 35s.; ballers, from 20s. to 45s., averaging 30s.; rollers, from 25s. to, in a few cases, L.5, averaging to about 50s. per week. The average earnings are considerably reduced through the hill country of Glamorgan and Monmouthshires by intemperance, which leads to much loss of time.'

The larger proportion of the workmen are Welsh, and accordingly the Welsh language is generally spoken, though large numbers, here as elsewhere, speak also

English. That Welsh should still be a prevalent tongue, must be considered a serious evil. For anything I know, it may be the most ancient and copious language in the world, but it unquestionably retards the moral and social advancement of the people; and it would have been well for Wales, as it would have been for the Highlands, that its aboriginal Celtic had long ago given way before modern English. Conserved in their primitive prejudices and superstitions, the lower Welsh are with difficulty moved to adopt enlightened usages. It is amusing to hear of schools in which children are taught to repeat English lessons without understanding a word of what they are reading; but when such things are heard of in connection with the church services, they are something worse than grotesque. In a rural district where I resided for a few days, the clerk of the parish could make the responses in the service only by rote. On the late occasion of a new and special prayer being issued, he could not, after a two hours' hammering by the clergyman, be made to read or follow it; and the divine, as a last resource, induced a gentleman of the neighbourhood to undertake the office of clerk when this particular prayer came to be uttered! What would be thought in Scotland of a parish precentor not being able to read? or of a church, such as I visited in one part of the country, from the funds of which a number of clergymen draw a revenue, and which yet is honoured with a service only one day in the year? These are painful things to reflect upon; and, united with the recent evidence, as laid before parliament, on the state of morals and education in Wales, demonstrate the utter hollowness and inefficacy of the system of polity which has for centuries afflicted this fine section of the United Kingdom. The Church is said to be at length rousing from its torpor, but is it not too late? Everywhere one goes in Wales, he sees the chapels of dissenters, without whose vigilant labours, it is acknowledged, there could have been in many places no public profession of Christianity for the mass of the population. Such at least is distinctly said of Merthyr by Mr Lingen in his report respecting the town; and considering the low state of education, with the general absence of a superior class in the great seats of manufacturing industry, the wonder is, that the people behave so well as they do. The cementing element in their social state seems to be money—the receipt of weekly gains; and while this lasts, not much is to be feared. But it may be regretted that the enormous sums paid and received in and about Merthyr should come to so little good. The houses of the workmen, which generally open to the street, have a clean and neat appearance; but they are said to be overcrowded, and the family means are economically expended. Much, I was told, is squandered on gay and expensive female dress for the sake of Sunday show; and the inordinate drinking of tea, purchased mostly on credit from hawkers, is described as a prevalent cause of impoverishment. In the gossiping tea meals the men do not participate; and when they return home, and find nothing to share with their family, they are 'the more ready to resort to the public-house.' On Saturdays and Sundays there is a good deal of heavy drinking, and drunken brawls are frequent. It will scarcely be credited that in Merthyr there is no savings' bank, in which the savings of the thrifty might be deposited. 'Formerly there was one, but the manager ran away, and carried L.2000 in deposits off with him; and the effect of this loss has operated very unfavourably on the people.' Why is there not a national security savings' bank in the place? or why do not the employers unite to establish and guarantee such an institution? We may, however, as pertinently ask, why the employers take so little trouble to cultivate humanising feelings in their men, and give them neither libraries nor reading-rooms? 'To provide for the education of the young, there are no schools of public institution except Sir John Guest's at Dowlais, and the National Schools at Merthyr. For the children of the men employed at the Cyfarthfa, Plymouth, and Pen-y-

\* By removing the soil, and afterwards placing it on the levelled surface of the tip, might not a good purpose be served: the making, for example, of gardens for the workmen?

Darren works, no provision has hitherto been made, further than some trifling subscriptions by the proprietors to the National Schools.' When this was written by Mr Lingen, an effort, he says, was making. I did not hear that it had sensibly altered the situation of affairs. Where there are schools connected with iron works, they are supported by compulsory stoppages from the men, whether they have families or not. Besides the objectionableness of this practice, it says little for the considerate benevolence of the employers, one of whom, an absentee, I was told, makes upwards of a hundred thousand pounds annually by his works, and is reckoned as worth a couple of millions of money.

So ends my chit-chat on Merthyr-Tydvil. From this seat of energetic industry, we proceeded by railway down the vale of the Taff to Cardiff—a line of communication which offers an immediate outlet to the great iron trade of the district. Cardiff is also pretty much a creation of recent times. Until not long ago a poor Welsh town, it has arisen, under the fostering care of the late Marquis of Bute, to be a large, cheerful, and prosperous seaport. Cardiff Castle, a modern mansion built within the grounds of an ancient fortress, may be said to form the kernel of the town; and here the late marquis died, lamented by the whole population. What this nobleman did from his own private resources exceeds in magnitude any private undertaking in the United Kingdom, the Duke of Bridgewater's canals excepted. Owning a large open moor between the town and the sea, he, with the aid of an act of parliament, caused a large portion of the land to be made into a series of wet docks, fit for the reception of vessels of all classes. These docks, extending about a mile in length, and entered by sea-gates forty-five feet wide, having a depth of seventeen feet at neap, and thirty-two feet at spring tides, present an imposing spectacle of shipping. Along one side runs the railway from Merthyr, and by this means the manufactured iron is transferred at once to the vessels which are to carry it to all parts of the world. 'The outlay in money on the whole of the works has, it is understood, exceeded £300,000; to which should be added the value of the ground, and of the lime and stone, and piles, all of which belonged to the marquis.' I could not observe without regret that between the docks and the sea there exists at low water an extensive tract of sludge, composed of the matter with which the Bristol Channel is in all its conditions charged, and through which a passage for vessels will require to be artificially maintained.

I have little farther to say regarding our excursion. From Cardiff we proceeded across a pretty piece of low-lying country to Newport, a considerable town on the Usk, where large shipments are made from the Monmouthshire iron-works. By a screw-propelled steamer, more swift than pleasant, we were carried across to Bristol in the space of less than two hours.

W. C.

#### A HONEYMOON IN 1848.

ONE of my friends, who had never arrived at doing anything, from having been for the last ten years in a happy state of expectation of a consulship in the East, made up his mind some time since to settle in Paris. He is yet young, and much given to day-dreams. However, though he passed for somewhat of a visionary, he was taken up seriously by a banker in that matter-of-fact region the Bourse; the worthy gentleman having ascertained that my friend Henri Delmasures had some hundreds of acres of land in Beauce and Normandy on which to build his castles in the air. He was a romantic visionary, but yet a landed proprietor. The banker, after a whole night spent in convincing himself that his daughter must be happy with such a man—a conclusion he arrived at by a process of adding, multiplying, and subtracting—consented to bestow her hand upon him.

Mademoiselle Matilda Hoffman was not merely a young lady wrapped up in bank-notes or cased in

bullion; she had, on the contrary, in the atmosphere of the three per cents, imbibed somewhat of the aerial grace of nature and poetry. The chink of the guineas had not prevented her hearing the airy voices that in every varied tone—but all soft, sweet, cheering—whisper the young heart, and fill its spring-time with delight. The dark, dull, close house in which she lived had not shut out from her all fairy visions of the

— 'Gay creatures of the element,  
That in the colours of the rainbow live,  
And play in the plighted clouds.'

And thus when my friend spoke to her a language not very usual before the 24th of February, till which epoch nothing was more rare than a union of hearts, it was little wonder that she listened to it, then learned to love it and him who spoke it.

The only unions taking place of late in France were marriages between rank and ready money—between position and pelf. Nor, incredible as it may seem, was this altogether to be laid to the charge of too cruelly-prudent papas and mammas; for the young ladies themselves had more than their full share of the fault. A rage for titles, or a passion for gold, possessed every heart, and had dispelled all the delightful illusions, all the bright-glowing romance of life. It is not long since I heard a young creature, who had scarcely seen seventeen times the budding of the hawthorn, say in confidence to a friend, 'I will marry no man that is not either a nobleman or a stockbroker;' while the friend on her part reciprocated the trust reposed in her by a whispered determination 'never to marry any one but a prince or a banker.' But Matilda Hoffman troubled not herself either about the titles her Henri had not, or the money that he had: she was in love, just as the young were wont to be in the Golden Age. She was delighted to find that he did nothing, could do nothing, and wanted to do nothing. 'At all events,' she said to herself, 'he will not immure me in a bank; and we can go where we like, free to love and live for each other.'

It is but due to my friend Delmasures to say that he was quite ready to live for her. Matilda Hoffman had suddenly shone out upon him as the visible image of his beau-ideal of grace, goodness, and loveliness—as his taste personified. The matter was soon settled, and the marriage fixed to take place on the 24th of February.

On the evening of the 23d, after repeated calls, we at length succeeded in finding the mayor at home. Whilst the young lady was signing the necessary documents, the functionary entertained her with a lecture on politics and morality. He did not find it a very difficult matter to prove to her satisfaction that a government which thus sanctioned love by marriage was the best of all possible governments, in the best of all possible worlds, and might defy any attempt to subvert it. On leaving the mayoralty-house, however, neither M. Hoffman, the bridegroom, nor the witnesses, could find their carriages. Whilst the mayor, in all the loyalty of his tricoloured scarf, had been proving that there was nothing serious in this ebullition of boys and sucking children, the heroic and patriotic *gamins* had seized upon every hackney-coach, cab, omnibus, and other vehicle to make barricades.

That night Matilda passed alone in prayer for the dying. The next day at eleven o'clock Henri Delmasures presented himself at the banker's in the dress of the evening before, which it was evident he had not taken off all night, but with the addition of sabre and pistol, and no small quantity of mud.

'But, my dear friend,' said the banker, without raising his eyes from three or four newspapers he held in his hand; 'my dear friend, we cannot marry to-day.'

'Not marry to-day! Who says so?'

'Do you not know what has happened? The people have been making barricades. M. Molé succeeds M. Guizot; M. Thiers succeeds M. Molé; M. Odillon Barrot is in place of—I forget whom—but no matter—the



people will soon be in everybody's place. Just glance at these papers: really some of the predictions are quite terrifying."

"Not an instant is to be lost!" exclaimed Henri. "Where is Matilda?"

He hurried to the young lady's room, and found her in her wedding-dress. "My own Matilda, how lovely you are looking! But we must hasten to church, for in one hour it might perhaps be too late. You must not leave me longer in this revolutionary torrent that is carrying all Paris away. See, I have been fighting hard—were I not modest, I would say as hard as a *gamin*. To-morrow the republic—but to-day love!"

The terrified girl threw herself into the arms of her Henri. "In mercy take me hence; far from the world if you will; but anywhere from hence!"

"But, my love, you must change this dress. We shall have to make our way to the church over the barricades."

Before an hour had elapsed, the curé of the parish had pronounced the nuptial benediction in a small chapel, the humble walls of which were wont to witness only the plighted vows of those who had no wealth save their strong arms and true hearts.

"Now," said Henri to Matilda, "let us leave your father to finish his discussion with the curé on the present state of affairs, and let us fly to some steam-carriage that, swifter than the wind, will take us somewhere—I care not whither, provided it be to a country where we can peacefully enjoy our honeymoon."

"Suppose we take the railway to Rouen? Well do I remember in the woods there an old château; it was enchanting, dear Henri. I spent six weeks there last summer wandering in its groves, with no one to speak to but the trees. I am only afraid it is too near Paris: let us go to the other end of the world."

Henri and Matilda were soon on their way to Rouen, at the full speed of a train baptised that very morning 'the Republic'; and through the window of their carriage they were witnesses of the general flight attesting 'the magnificent national co-operation that had accepted the new institutions,' and the sincerity of the adhesions to the republic, and evincing the universal confidence in the proclamations that order, liberty, and equality had been established. "Hurrah! the dead can ride apace," says the poet Bürger; but fallen courtiers can ride still faster. "Only look," said Matilda, "at that servant in livery galloping so furiously, that I should not wonder at his outstripping us. Do you see him?"

"I see him," answered Henri: "it is one of the ex-ministers."

"And that poor young woman who is dragging her feet so slowly along the rough road, and from time to time looking back with such a terrified air?"

"I see her," replied Henri: "she is a princess."

Thus they beheld pass along before them all that, for nearly twenty years, had been the court and the administration. A dark page of history was unrolled upon the high road—the last unfinished story of kings and queens—Once upon a time.

Journeying in this way, the two lovers arrived at Havre. While strolling on the sea-shore in the evening, they perceived an old gentleman hurriedly making his way towards a steamer a little apart from the rest of the shipping. Henri and Matilda paused to observe him. It was the Monarchy leaving the soil of France; and the most determined republican would scarcely have elided the respectful salutation of the young pair—the respect of pity.

But they gave up an intention they had formed of going to London. Was it from reluctance to follow in the track of the fugitive monarch, to come in contact with the hoary head from which a crown had so lately fallen? Or was it the fear that the ex-king might carry about with him, however involuntarily, the seeds of a successful revolution? Perhaps each of these reasons had some influence in changing their route. Neither would they venture to Brussels, for reports had reached

them, whether true or false, of a new edition of a revolution there as well as in Holland, where the people were demanding a little, and the king granting a great deal.

However, as go somewhere they must, they went to Switzerland—the classic land of honeymoons. "Switzerland being already a republic," said they to themselves, "we need not be afraid of its wanting to make itself one." In the confidence of this hope, Henri and Matilda rented a chalet by the side of a mountain, where they might place themselves and their love under the protection of the Landammann and the old Helvetic Confederacy. But they were hardly on their way to it, after a short stroll by the side of the lake, when they perceived a band of armed nationalists wheeling about them. It was at Neuchâtel.

They now turned their thoughts to Germany. "Let us go to Germany," said they. "There no one troubles himself about anything but waltzing or metaphysics." They set out, but they were scarcely half-way, when they were warned, "Do not go to Vienna; do not go to Berlin."

As their carriage was about to cross a bridge, a female equestrian, with her hair floating over her shoulders, and her long graceful velvet drapery falling over her Arab horse, yet withal of a martial air that might have become the queen of the Amazons, galloped up so suddenly to them, and threw herself so directly in their way, that the postilion had scarcely time to pull up the leaders. "Back there!" she cried, as she presented in his face a little pocket-pistol.

The terrified postilion fell back upon the horse he was riding, while Henri, putting his head out of the carriage-window, recognised in the desperate Amazon the Countess de Landsfeld.

"Madame," he said with a courteous smile, "I beg to assure you that we are neither Prussian gendarmes nor Bavarian municipal guards. Have the goodness, then, to reserve your powder and ball for some greater political emergency, and allow us to pursue our route."

Lola Montès broke into a merry laugh, which made the mountains ring with its echo. They were like old courtiers, but a little more genuine—perhaps the last courtiers.

"Take good advice," said she, "wherever you get it. Go not to Germany: they have burned my hotel."

So saying, the Countess de Landsfeld set off like an arrow from the bow, leaving Henri and Matilda to exchange glances of surprise, and to ask each other, in utter despondence, whither they were now to bend their steps—what country would receive them? "Let us go straight forward," at last they cried. And straight forward they went, through woods, and meadows, and ravines, till the Rhine became the splendid barrier to further progress, unless they committed themselves to its waters. They did so, and stopped not till they came to Johannisberg, where they met an old man seated in an arbour, with his bottle and glass before him.

It was M. de Metternich, who was drinking his last bottle of Johannisberg.

"Your excellency," said Henri, respectfully saluting—the bottle—"your excellency will pardon me if, in presuming to address you, I derange the balance of power in Europe; but we are a young couple from France, who are in search of some pretty little cottage where we may give a few short weeks to each other. Your excellency—who knows all news better than any telegraph, any newspaper—will have the goodness to tell us whether there are any cottages in Germany?"

The diplomatic eye of M. Metternich flashed somewhat angrily; but seeing nothing but artless simplicity in the faces of the young couple, he filled a fresh bumper, tossed it off, and buried his face in his hands.

"My Lord Minister," said Matilda timidly.

"I am no longer minister," answered he.

"My Lord Prince," stammered Henri.

"There are no more princes."

'Well, my Lord of Austria.'

M. de Metternich raised his head, looking sad as a German ballad.

'Austria is no more,' said he in a gloomy whisper. 'Austrians have destroyed it in destroying me. Diplomacy is no more, for I am the last diplomatist; and I!— Oh, Talleyrand, thou hast done well to die! The great art of working the hinges upon which all politics turn is at an end for ever. The people break the hinges when they cannot open them, and the axe is a hammer that opens every lock. We have fallen upon evil times, when words are of no other use to statesmen than to express their thoughts, and that even when perhaps they have none to express. Pity me then; behold me reduced to swallowing my last refuge of diplomacy—that is to say, my Johannisberg wine, that wondrous beverage with which I have mystified all Europe for more than sixty years.'

And M. de Metternich was silent, having nothing more to drink or to say.

I now lost all trace of Henri and Matilda for some time, but rested satisfied that they had at length found the promised land, when this evening I received the following letter:—

*'BRESCEIA, March 19.'*

MY DEAR FRIEND—We have at length arrived in Italy, after having passed through twenty countries all in revolution. Up to this moment we have not had an hour's quiet, for wherever we turned, there burst the revolutionary waterspout. Whatever shore we reached, the waves broke in upon it, and drove us before them. We have been at Brescia about half an hour, and must leave it before the hour is over. We were afraid of Vienna—afraid of Milan. "No strangers!" was the cry there; and though I knew they meant the Austrians, yet I was not certain how far they might carry their nationality. We knew that Rome was celebrating a constitutional carnival; that Florence's Grand Duke was proclaiming constitutions; that Naples had a king to-day, and will have to-morrow a Masaniello. We thought of Monaco, but it appears a republic is proclaiming there. The republic of St Marine next occurred to us, but there they are seriously talking of proclaiming an emperor. A prophetic hurrah has reached us from the Don Cossacks. Asia has turned her eyes westward, and drawn the sword against the Emperor of all the Cossacks. Every day we see the moon rising, it appears to us under every form, and in every colour. I suppose you have it tricoloured in Paris? But it is not the honeymoon: alas! we know not where to find that! To what shore, favoured of Heaven, are we now to steer our frail bark of love, launched into the open sea in such stormy weather? We had joyfully cried out "land!" when we reached Brescia. Here in the fair fields of Lombardy, where spring has already come with her hands full of opening flowers and verdant foliage, we hope to forget the world and its revolutions; but hardly had we alighted from the diligence, than a huge creature, one of the rabble, collared me, and demanded if I were not the viceroy; for the report had been already spread that the viceroy, driven from Milan, was on his way to Brescia, which he believed to be friendly to him.

"My worthy friend," said I, "you really wrong me. I have just come from a country where the very word royal is erased from the dictionary." Apropos of the dictionary, have you still an Academy? By this time the diligence was surrounded by a crowd, not less demonstrative in its greetings than my first friend. I commenced a parley with them, interrupted from time to time by a poor nervous Englishwoman, white as her country's cliffs, protesting that though she did come from Munich, she was not Lola Montès. In a few minutes, however, a diversion was effected in our favour by the arrival of a second carriage. The mob rushed towards it, and seizing upon a man who alighted from it, dragged him into the next square. They say it is the viceroy: I am not sure; but one thing is certain,

that the revolution is here as well as everywhere else. Danton said "that we did not carry our country about with us on the soles of our shoes;" but methinks I must carry about with me dust pregnant with revolutions.

'At length, in utter despair, I thought of Ireland. "I have heard of no revolution in Ireland." "If not," answered Matilda, "then we must not go; a revolution there would imply quiet, for it implies change, and the usual natural state of that country is disturbance."

'Her woman's wit at last suggested, "Why not go back whence we came?" She is quite right. Will you, then, have the goodness to call at my house and tell my English servant—but I was forgetting that the cause of liberty, equality, and fraternity would be compromised by my retaining him in my service—but tell any of my people you can find that we are on our way to Paris, and hope to spend our honeymoon at home?'

'Farewell. I have but time to add, health and fraternity,  
HENRI DELMASURES.'

### BISSET THE ANIMAL TRAINER.

STERNE says it is easy to travel from Dan to Beersheba, and cry 'All is barren.' It is equally easy to glance at the capabilities of the brute creation, and cry 'All is instinct.' But what this instinct is, and what affinity it bears to man's boasted prerogative of reason, are questions of a graver character—questions which have demanded and received the attention of some of the wisest of our race; but which have as yet received, and are perhaps at present capable of receiving, only vague and unsatisfactory replies.

The actions of many animals, and even of insects, frequently exhibit an appearance of forethought and knowledge which may well excite our surprise. A remarkable instance of this appears in the construction of the honeycomb, which is formed, in every respect, on the most approved mathematical principles. The bottom of a cell must be composed either of one plane, perpendicular to the side partitions, or of several planes meeting in a solid angle in the middle point; otherwise the cells could not be similar without loss of room. For the same reason the planes, if more than one, must be three, and no more; and by making the bottom to consist of three planes meeting in a point, much material and labour is saved. The bees follow these rules with as much accuracy as if they had been regular students in geometry. Dr Reid, in the course of some perspicacious observations on this subject, observes—"It is a curious mathematical problem at what precise angle the three planes at the bottom of a cell ought to meet, to make the greatest saving in material and labour. It is one of those problems belonging to the higher parts of mathematics, called problems of maxima and minima. The celebrated M'Laurin resolved it by a fluxionary calculation, to be found in the Transactions of the Royal Society of London, and determined precisely the angle required. Upon the most exact mensuration which the subject could admit, he afterwards found that it is the very angle in which the three planes in the bottom of the cell of a honeycomb actually meet." Though we apprehend there are few who would be disposed to dispute the doctor's pious and elegant remark, that 'the geometry is not in the bee, but in the Great Geometrician who made the bee,' it is a subject which, taken in connection with the many similar instances of skill and knowledge which meet us at every turn, is not only of deep interest in itself, but well worthy of the most searching investigation which our powers will enable us to give it.

But there is something beyond this. It is sufficiently remarkable, and not too complimentary to our mental supremacy, that a philosopher of eminence, in solving a mathematical problem of acknowledged difficulty, should find that he had but discovered a principle which such an insect as the bee had long known and acted upon. But however surprising the acquisition of such know-

ledge may be, it is the common property of the race. All honeycombs are constructed on the same principle, and the latest structure boasts no superiority over those formed centuries ago. Thus, however astonishing the original acquirement, there is no power of progression manifested. No Christopher Wren or Inigo Jones has arisen among the bees to breathe over the cells an atmosphere of taste and elegance, and teach the plastic wax to assume hitherto unknown forms of grace and beauty. From this absence of improvement, many philosophers have attempted to draw the line at this point between instinct and reason. Smellie, in his 'Philosophy of Natural History,' says instinct should be limited to such actions as every individual of a species exerts, without the aid either of experience or imitation; and in accordance with the same views, Dr Gleig, in the 'Encyclopedia Britannica,' observes, that no faculty which is capable of improvement by observation and experience can with propriety be termed instinct. If we accept this view of the subject, it seems doubtful whether we are not compelled to allow the animal creation the possession of another faculty in addition to, and above, this supposed boundary of their intellectual nature. For though Smellie speaks of the improvement of instinct, the doctor very consistently remarks, that to talk of such a thing 'is to perplex the understanding by a perversion of language.' And yet it is a fact, as remarkable as interesting, that the faculties of animals are capable of such improvement; and that this capability is not confined to the higher species, but extends downwards to those grades which had hitherto been considered as quite beyond the pale of civilisation. Of this we have had such abundant testimony, that almost every man's experience can supply him with the proof. Not only have the wild denizens of the woods been brought by Van Amburgh and others to a surprising state of docility and acquired knowledge, and the king of the forest been taught to leap through a hoop, the elephant to make as dexterous a use of his trunk as a *chevalier d'industrie* does of his fingers, and several of the nobler animals to sustain their parts with credit in the performance of a regular drama; but some of the very lowest classes have developed, in the process of teaching, such latent powers and capabilities, as not merely to excite our present wonder, but seem to warrant the conclusion, that as we increase the skilfulness of our training, these developments will be found to increase with it. We do not think that the philosophy of this part of the subject, considered apart, and as distinct from the ordinary manifestations of instinct, has hitherto met with the attention which it deserves. We cannot, however, with any degree of justice, make the same complaint of the teaching itself; for the number of practical professors has so increased of late years, that an exhibition of trained animals which, a century and a half ago, would have been considered as occupying 'the debateable land' somewhere on the road between cheating and sorcery, is now almost as essential a part of every country fair as those dear old associates of our childhood—the wonderful puppet-show, with its men something larger than trees, and its skies something deeper than thumb-blue, and the venerable but ever fresh, mirthful, and delightfully-ridiculous Punch and Judy.

Among those who have directed their attention to the training of animals, there are few who have evinced more aptitude for the task, have prosecuted it with more ingenuity and patience, or produced more successful results from their labours, than a man of the name of Bisset, who was well known in London, and indeed in most parts of the kingdom, about the middle of the last century. We are not sure that we can claim for him the title of the father of the art; but it had certainly attracted little attention in this country before his surprising exhibitions gave it an *éclat* which it has never since lost, and which has now made it a regular branch of study among those who cater for the amusement of the public. Bisset was born in Perth about the year 1721, and brought up to the trade of a shoemaker.

Possessing that kind of talent which forms what is usually called 'a clever man,' he soon became noted as a skilful workman in the neater branches of the trade, particularly in what is technically called 'women's work;' and as Perth did not offer the encouragement to which he now naturally looked forward, he removed to London, where he not only found a wider field for the exercise of his abilities, but was enabled to push his fortune in another and more tender way, by becoming acquainted with a young woman of property, whom he soon afterwards married. This addition to his worldly means enlarged his views for the future: he established himself as a broker, was successful in his new business, and in a fair way for quietly accumulating a competence for the comfort of his old age, and then dying with only his 'grandchildren's love for epitaph,' when a chance circumstance gave a new current to his ideas, or at least changed the even tenor of his way. In the year 1739, he accidentally read in the newspapers an account of some surprising feats of a horse exhibited at the fair of St Germain's; this seems to have awakened in him a spirit of emulation, and he determined to see what he could achieve in the same way. It is scarcely probable that this circumstance drew his attention to animal teaching for the first time: such an incident, like many extraordinary accounts in our own day, might have made a transient impression, but would scarcely have produced such immediate results. It seems more likely that an early partiality for animals had caused him to feel an interest in their habits and modes of action, which led to a more attentive observance of them than is ordinarily paid. The nature of his early occupation, while it employed his hands, had allowed full leisure to his thoughts; and these thoughts were no doubt often engaged upon instances of brute capability which he had casually observed, and sometimes, perhaps, upon the means of further developing that capability by tuition. However this may be, the account, if it did not first cause him to think, certainly first induced him to act; and he immediately began those experiments which have placed his name so high on the list of animal teachers. The first objects upon which he tested his powers were a horse and a dog; with which his success was so decided, as to strengthen the belief that his system of training was no sudden and immature impulse, but the result of close thought and patient observation. This success encouraged him to extend his experiments; and for his next pupils he selected two monkeys, which he trained to the performance of a regular exhibition; one of them going through a good imitation of biped dancing, and tumbling on the tight-rope, while his companion held a lighted candle in one paw, and played a barrel organ with the other. As these feats began to attract attention, and draw considerable audiences to witness them, he resolved to pursue his system on a more extended scale; and the result was equally creditable to his ingenuity and his patience. Having procured three young cats, he contrived to teach them not only so to strike the dulcimer with their paws as to produce a regular tune, but to add their 'most sweet voices' to the concert, singing first, second, and third, in the regular way. This performance was sufficiently striking in itself, and doubly so at a time when such things were strange. We who live in an age when even fleas are 'industrious'—that is, apart from, and over and above, their usual vampire vocation—when cats turn coachmen to doves, and birds die and revive again at bidding; when mice are dressed as ladies, and go to bed with lighted candles; and monkeys remind us of the enchanted prince in the 'Arabian Nights;' we have been too much accustomed to these things for them to inspire us with any vivid interest; but in that day, when they possessed all the charm of novelty, their exhibition drew such crowds, that Bisset was induced to transfer the performance from his own house to the Haymarket Theatre. There his feline protégés made 'their first appearance on any stage' in the famous *Cats'*

*Opera*—a piece which, from its novel nature and interesting character, as an evidence that the brute creation possessed capabilities hitherto not only undeveloped, but undreamt of, brought such overwhelming audiences to the theatre, that in a very few days the fortunate *maestro* saw himself the possessor of nearly a thousand pounds. He now resolved to convince the world that however wonderful they considered it that such effects could be wrought on animals hitherto deemed to rank low in the scale of rationality, there was still 'in the lowest depth a lower deep,' from which equal food for astonishment might be drawn. He taught a leveret to bear its part in the singular concert, by beating on a drum with its hinder feet, and to play several marches in the same way. At subsequent exhibitions, sparrows, linnets, and canaries, spelt the names of the company, told the hour and minute of the day, and performed other feats of a similar nature; and as a crowning specimen of his power over the inferior races, he trained six turkeys to go through a regular dance; and one to fetch and carry like a dog, and, with blackened claws on a chalked board, to trace out the name of any person present that was placed before it. The means by which he contrived to accomplish such surprising ends, not merely with animals of recognised sagacity, but with creatures which had been deemed incapable of exhibiting a ray of intelligence, were of course known only to himself; and as the results appeared to warrant the presumption that he had found the golden key to the coffers of prosperity, he was naturally not anxious to peril his expectations by unlocking 'the secrets of the prison-house.' But though it is to be feared that, had his system of instruction been disclosed, it would not have been found to accord with the dictates of humanity—for he confessed that he had taught the poor turkeys on the Eastern method, by heating the floor beneath them—there is still much left for the results of ingenuity and patience, and much more for the existence of a capacity in the animals themselves, hitherto unsuspected, and perhaps even now capable of higher development under improved means.

Bisset's own labours in the field, however, now received a premature check. He had gone on for some time reaping his golden harvest, and no doubt calculating that the same seed would always produce the same fruit. But the simple-hearted shoemaker had yet to learn the instability of the popular mind. The novel character of his early exhibitions had caught the attention of the town; they became the rage, and every one was eager to witness them: this zest had now begun to cool; the votaries of fashion had set up some other idol; and poor Bisset had the mortification to see the benches, which had once scarcely sufficed to accommodate the crowds that eagerly thronged to fill them, now gradually grow thinner and thinner. His exhibitions were more carefully got up than ever, and varied by every means which he possessed; but all would not do: the public curiosity was satisfied, and they would no longer draw. Bisset did not find the expense of his establishment decrease in the same ratio as its magnetic powers, and saw his guineas melt away like snow in the sun-beam, till he was at last compelled to dispose of a portion of his long-cherished animals, and descend to an itinerant exhibition of the rest. Even this resource seems to have been only partially successful; for we find him in 1775 abandoning London altogether, and travelling through a portion of the north of England; till at length, finding it impossible to rekindle the extinguished embers of excitement, he resolved upon a totally opposite course of life—by exchanging a profession whose aim was to raise the brute as near as might be to the level of the man, for one which too often debases the man to the level of the brute. He opened a public-house at Belfast, and for some time seemed not to have an idea beyond licensed victualling. But the habits of years are not to be eradicated in a moment: the old tree is not to be drawn out of the earth like the plant of yesterday. It was not long

before he possessed a dog and cat, whose feats did as much honour to his powers of teaching as those of their predecessors; and being put upon his mettle by the assertion that, however successful with more docile animals, he would never be able to overcome the obstinacy of a pig, he immediately purchased a small black suckling for three shillings in Belfast market; and training it to lie under the kit whereon he again plied his original trade, he bent his energies to this new and more difficult experiment with all the zest which a huntsman feels when he knows he is on the track of an old fox. For seven months, every means which ingenuity or experience could suggest were tried, and tried in vain: the brain of the pig seemed incapable of containing any idea beyond that of wash; and he was on the point of relinquishing the experiment as hopeless, when a fresh method of teaching happened to strike him. Unwilling to acknowledge himself baffled, he put it in practice; and with such a triumphant result, that at the end of another six months his pupil was on the high road for becoming what is not unfamiliar to us in the present day, but was then, we believe, an unheard-of wonder—a learned pig.

The hope of 'driving his pig to a good market'—the force of old habits—and perhaps the astonishment expressed at his success, and a little pardonable vanity in being able to show the world, which had neglected him, his ability to instruct and control an animal whose stupidity has long been an axiom, and whose obstinacy has passed into a proverb, succeeded in tempting him once more from his trade; and we find him in Dublin, in August 1783, exhibiting his pig at Ranelagh. His triumph over its native stubbornness had been complete; and besides manifesting a degree of docility and obedience more characteristic of a spaniel than its own species, it is recorded that it would cast up accounts with accuracy, spell the names of persons present without any apparent direction, point out the words they thought of, distinguish the married from the single, and kneel and make obeisance to the company at the close of the exhibition. These performances, which, after allowing for the usual charlatanism of such exhibitions, were still highly surprising, began to create what the newspapers call 'a sensation.' Some of the old tide of prosperity began to flow back; and Bisset already saw, in anticipation, the return of at least a portion of those guineas which had formerly weighed down his purse-strings. These expectations were strengthened when, on the weather's rendering it necessary that he should remove the animal into the city, and having procured the chief magistrate's permission, he advertised it for exhibition in Dame Street, many persons of distinction honoured him with their presence, and the applauses bestowed on his skill and patience were of the most flattering character. This event, however seemingly so auspicious, proved a fatal one for poor Bisset; for he had not occupied the room many days, when an officer—evidently one of those who consider that even 'a little brief authority' is worth nothing unless made the most of—broke into the apartment, under the pretext of its being an unlicensed exhibition, wantonly destroyed the apparatus which directed the performance, and loaded with coarse abuse the inoffensive proprietor himself, who in vain pleaded the magisterial permission as a sufficient sanction for his presence. A threat of a prison and the loss of his pig, if he dared to repeat the exhibition, was the only answer to his mild remonstrances; and the dread of the fulfilment of the menace, together with the destruction of his property, so terrified the poor man, that he lost no time in quitting a place where his hopes had been a second time so lamentably disappointed. He had scarcely regained his home, when the agitation of his mind, acting on a weak and enfeebled body, threw him into a fit of illness, which, in effect, brought both his interesting labours and personal anxieties to a premature close. For although he partially rallied, and being pronounced able to travel, had resolved to return to London, the scene of his early triumphs and his tran-



sient prosperity, a relapse of his illness overtook him at Chester, and a few days saw his quiet and harmless spirit removed to another world.

### SNEEZING.

AMONG the many enchanting tales of the 'Arabian Nights,' in which our youthful fancy of old luxuriated, we remember there was one of a certain humpbacked schoolmaster, who gives the history of his unfortunate deformity. Among the various valuable precepts which he inculcated, those of politeness seem to have held a chief place; and when he sneezed, we are told the scholars were taught to clap their hands, and exclaim 'Long live our noble master!' One day the dominie and his pupils were walking in the country: the day was sultry, and they were all glad when at last they fell in with a well. But, if we remember aright, the bucket was at the bottom, and the worthy dominie resolved to descend and bring it up full. Having filled the bucket with the 'crystal treasure,' the master gave the word, and the youths forthwith commenced hauling him up again. When near the top, as ill luck would have it, their preceptor sneezed! Simultaneously the boys let go, and, clapping their hands, vociferated the accustomed 'Long live our noble master!' while the luckless dominie, bucket and all, went rattling down to the bottom again—breaking at once his back and many of his prejudices in favour of etiquette.

When this tale first met our youthful eye, little reflective though we were, sneezing we thought was an odd thing to make the subject of compliment. But the discoveries of our maturer years have sufficiently proved how very ignorant we must have been to come to any such conclusion. Jewish rabbi and Christian pope—Arab novelist and classic author—the sands of Africa, even the savannas of the new world—all furnish proofs of the high importance attached to the stermutative functions. Records of this are found in all countries and in all times—except the antediluvian.

And this brings us at once into contact with the Jewish rabbis—those extraordinary fellows, who seem to have been better acquainted with Eden than ever were Adam and Eve—who know all the secrets of the Ark, and would beat Noah himself at an inventory of its furniture. Such extensive chronological attainments must be invaluable in searching out the origin of things; and we are glad we can derive the early history of sneezing from authorities so unimpeachable. As there is no mention in the Sacred Writings of illness among men until some time after the Flood, the rabbis declare that sickness was altogether unknown in the early world. How, then, it may be asked, did men die in those days? Why, they just sneezed, and expired. So say the rabbis. They tell us, moreover, that Jacob, disrelishing this speedy exit from life, earnestly desired that some warning should be given in order to prepare for the momentous change. This, say the rabbis, was the object for which he wrestled with the angel. His prayer was granted: he sneezed, and fell sick. The hitherto unheard-of circumstance of a man sneezing, and yet surviving, must, on the supposition of the rabbis, have made a great sensation among mankind: still more would the advent of disease—and thus associated, sneezing thenceforth ranked as one of the most important phenomena of the human system.

So much for tradition. But mythology also pays a like homage to this 'wind of the head.' Sneezing is said to have been the first act of the first man made by Prometheus. After giving the last finish to his work, Prometheus, we are told, cuddled his brains as to how he

was to impart to it life and motion. The difficulty, however, was found to be a poser: he needed celestial aid to accomplish his purpose. Accordingly, conducted by the goddess Minerva, he skimmed lightly through the regions of several planets, and at last approached the sun. This was the stuff he wanted. Concealed under the mantle of his divine guide, Prometheus neared the resplendent orb, and filled with its liquid fire a phial which he had brought for that purpose, hermetically sealed it, and forthwith regained earth sound in limb and overjoyed in spirit. Applying the flask to the nostrils of his statue, he opened it, and instantaneously the subtle sunbeams insinuated themselves with such power through the pores of the spongy bone that the image sneezed. Upon this impulse the living principle was diffused through the brain, the nerves, the arteries—and the image stood forth as good a man as its manufacturer. It is added that Prometheus, overjoyed at the success of his experiment, broke into words of benediction and of prayer for the preservation of the wondrous work of his hands; and that this first man, awakening into consciousness while the words were being spoken, ever afterwards remembered them; and on every instance of stermutation in himself or his descendants, imitated the example of his artificer.

It was thus that the poets of Greece and Rome endeavoured to account for the existence of the wide-spread custom of saluting any one who sneezed; but the monks of the middle ages have not been behind-hand with them in the attempt. According to their legends, in the days of St Gregory the Great there reigned a deadly poison in the air of Italy, so that any one who sneezed or yawned instantly fell dead; and in consequence of the great mortality, the Pope ordained that on all occasions when a yawn or sneeze occurred, the bystanders should repeat certain words of prayer, to avert danger from the luckless wight who had been seduced into so perilous an indulgence. But in this case the heathens have undeniably the advantage over mother church: in regard to truth, we believe they are pretty much on a par; but for the children of the Vatican to attribute to the sixth century the origin of what had existed for a thousand years before, is ignorance 'beyond all hooping.'

The custom was of long standing even in the days of Alexander the Great, whose preceptor Aristotle made it the subject of erudite remark. In all countries the spirit of the salutation was the same—from the terse '*Salve!*' of the Romans, to the rather Irish Orientalism, 'May you live a thousand years, and never die!' and among the Greeks and Jews the very word was identical—'*Live!*' The Greeks have a capital story in one of their comedies of an old fellow called Proclus, who had a nose so very big that he could not blow it, as by no possibility could his hands reach to the end of his nasal protuberance; and to give posterity a still better idea of this formidable proboscis, the Greek dramatist adds, that when this Mr Proclus sneezed, he could not even cry 'God help me!' as the nose was too far off for the ear to hear.

But far from being confined to classic ground and the realms of Asia, the practice existed even in the depths of barbarous Africa. Old accounts of Monomopata testify that whenever the king of that region sneezed, all those who were in the place of his residence, or even in the environs, were simultaneously apprised of it, either by signs, or certain forms of prayer made on his behalf, which instantly spread the intelligence from the palace to the city, and thence to the suburbs; so that nothing was heard around but devout wishes for the prince's health, and a kind of 'God save the king!' which every one was obliged to repeat aloud. More extraordinary still, this piece of etiquette was witnessed by the Spaniards among the natives of the new world. The author of the 'History of the Conquest of Florida,' informs us that the cazique of Guachoia having sneezed in the presence of Soto, all the Indians present immediately bowed low before their prince, venting aspirations that the sun would preserve him, enlighten him, and be always with him.

A custom so singular and so universal could not fail

to attract the notice of ancient writers, who have endeavoured to deduce its origin from natural religion. The head, they said, is the principal part of man: it is the fountain of the nerves, of all the sensations—it is the dwelling-place of the soul, that divine particle which thence, as from its throne, governs the whole mass—that hence a peculiar dignity always attached to it, and men in early times used to swear by their head as by something sacred—that they never dared to taste or touch any kind of brain—that they even avoided naming the word, usually expressing it by a periphrasis, such as 'white marrow.' From all this, it is added, it is not strange that their descendants should continue to reverence the brain, and attach importance to sneezing, which is its most visible manifestation.

As the ancients cannot now defend themselves, it would be ungenerous to make disparaging remarks on this theory of theirs; so we will rather pursue our theme, and find the sternative function, in unholy wedlock with superstition, playing the part of an influential, but on the whole very harmless, familiar spirit. Greeks, Romans, Egyptians, all listened to its 'warning trump' as to the voice of a present deity; and there are on record endless instances in which a sneeze has determined an embarrassed heathen in his line of conduct. One day, for instance, Xenophon was haranguing his troops, and just as he was impetuously exhorting them to adopt a hazardous, but in his view indispensable resolution, a soldier sneezed: spontaneously, says the historian, the whole army adored the deity; and Xenophon, skillfully profiting by the incident, wound up by proposing a sacrifice to the 'saviour god' who had thus counselled them to adopt the salutary plans of their general. In Homer, likewise, when Penelope, harassed by the importunities of her suitors, is venting imprecations against them, and breathing wishes for the return of her Ulysses, her son Telemachus interrupts her with a sneeze so loud, that it shakes the whole house: Penelope gives way to transports of joy, and sees in this incident an assurance of the speedy return of her long-absent husband. Even the wondrous demon of Socrates, which the sage so often consulted in the exigencies of his eventful life, was neither sylph nor salamander, if we are to trust a passage in Plutarch—neither genii nor conscience—it was a sneeze!

It is true there is something rather anti-romantic in a sneeze; yet in olden times, when Venus was still queen of beauty and love, a gallant would often not have exchanged the sound of its rasping blast for the softest breathings of Zephyr, or the sweetest song of the nightingale. Indeed, in the ever-shifting world of love—of all others the brightest, yet most troubled—this omen was regarded as the weightiest and happiest of all. Parthenis, a young Greek girl, who has rather foolishly allowed herself to get head and ears in love with a youth, after many sore struggles, and long irresolutions, resolves to write an avowal of her passion to her dear Sarpedon. Let us follow her to her bower or her boudoir. There she sits, the loving, foolish creature! with as heavy and anxious a heart as ever belonged to a sweet girl of sixteen. The gentle murmurs of the *Ægean* come floating into the room; and as she looks up, the evening sunlight falls cheerily on her pale cheek as it quivers through the vine trellis. Her eye is brimming, and her heart flutters as she resumes her stylus; for now she is at the very crisis of her letter, and is avowing her passion with guileless ardour, when a light, rapid convulsion shakes the stylus from her grasp. She has sneezed! It is enough! Parthenis is once more all joy: for she knows that at the same instant Sarpedon is thinking of her with sentiments as loving as her own. The heathen divinities themselves seem to have sneezed when more than usually pleased, and inclined to be beneficent; and the poets used to say of persons remarkably beautiful, that 'the Loves had sneezed at their birth.' Cupid appears to have been especially fond of thus testifying his approbation, as we learn from the sweet little poem of Acme and Septimellus, from which the following lines are translated:—

'Acme then her head reflecting,  
Kissed her sweet youth's ebriate eyes,  
With her rosy lips connecting  
Looks that glistened with replies.  
"Thus, my life, my Septimellus!  
Serve we Love, our only master:  
One warm love-flood seems to thrill us,  
Throbs it not in me the faster?"  
She said: and, as before,  
Love on the left hand aptly sneezed—  
The omen showed that he was pleased  
To give his blessing.' \*

This harmless superstition, however, seems to have ended with the classic ages; but the custom of saluting those who sneeze still survives in many parts of continental Europe. In the beginning of last century, M. Morin tells us that the Anabaptists in England had made themselves remarkable, among other things, by the 'whimsical zeal' with which they combated this custom; and in the preceding century, the essayist Montaigne said, 'Let us give an honest welcome to this sort of wind, for it comes from the head, and is blameless.' Snuffing, we fear, has had a hand in the decay of this remnant of ancient politeness; for we find the first-mentioned author lamenting that 'there is great reason to fear that we shall soon see this respectable custom die out; for sneezing have become so frequent, and so much in vogue, that it is rare now-a-days to see produced naturally those salutary functions which the human race has so justly deemed worthy of its respect. They are forced from nature whether she will or no, and it is no longer the same thing.'† There can be no doubt that superstition, from whatever cause arising, mainly engendered this respect for the function of sneezing; and accordingly, by the learned even of ancient times, it was frequently disregarded as a vulgar prejudice. But Clement of Alexandria, in his little treatise of politeness, goes further than this, and regards sneezing as a mark of intemperance and effeminacy: he says that it should be suppressed as much as possible; and is most unmeasured in his reprobation of those who seek to procure it by extraneous means. Though very many now-a-days set at defiance this anathema of the Greek Chesterfield, yet the usages of modern society coincide in the main with his suggestions; and when in company with those we respect, if sneeze we must, we at least endeavour to conceal it from observation.

Aristotle of old declared sneezing to be a favourable symptom of health; and the rather humorous light in which we generally regard it seems to confirm his decision. It is a gentle stimulus to a languid system—it is a refreshing evacuation of the head, which at once pleases and relieves us: such, say many, are the benefits of a hearty sneeze. But not so think many erudite disciples of *Æsculapius*. 'Hearty sneeze!' says Olympiodorus and his followers: 'why, sir, you're jesting with an earthquake, sir—an alarming physical convulsion! Does it not disfigure the prettiest face with epileptic tremors! It is a syncope, sir; nay, sir, it is a short epilepsy!' (*brevis epilepsia*). Verily this is a grave charge against sneezing. It is but lately that it first met our startled ears; but since then, we have ever looked upon a snuffer as a sort of swindler of the sexton—one who should long ago have been a source of revenue to some deserving cemetery company. Either the classic doctors are superannuated, or snuffers are infatuated sensualists, who, for the sake of a gentle titillation, and a still gentler nasal intoxication, peril in a single day more lives than a cat's. Their existence is a constant libel on the fair fame of Olympiodorus. Which, then, is right—the Greek or the disciple of Raleigh! The question, doubtless, seems *primâ facie* a very interesting one, affecting alike the queen on the throne and the child in the nursery; but on so grave a subject,

'Who shall decide, when doctors disagree?'

Perhaps much, as Sir Roger de Coverley remarks, may be said on both sides. For ourselves, we are content to

\* Blackwood's Magazine.

† 'Mémoires tirés des Registres de l'Académie Royale des Inscriptions et Belles Lettres.' Vol. v. p. 445. Paris, 1794.

believe that, like the patriarch, we enjoy a reprieve from the perils of sterneration. Moreover, we don't give a snuff for a sneeze—no, nor take one either; but should any of our readers think fit to investigate the subject, perhaps the society *De Lunatico Inquirendo* may present him with a cap and bells for his pains.

#### A VOICE FROM THE DEER FOREST.

In the midst of the dust and fret of political turmoils, statistics of misery and crime, and the many vexing questions that agitate our larger seats of population, one's mind is inexpressibly relieved in getting into the private society of some familiar old author, or into the presence of some sweet picture of tranquillity and innocence, or, better still, into some remote nook of the country, where we at once find nature in her best dress, and the few inhabitants still in a tolerable state of simplicity. We must hasten to tell the reader that a relief of this kind has been afforded to us in unusual amplitude by a book of the day, which, finding us deep in the troubles which pervade the world, from Paris to Vienna, and from Naples to Holstein, carried us in an instant into such a natural scene, and such a mental intercourse, as we had scarcely believed to have been left to these later times.

Had it fortune to an Englishman fifteen or sixteen years ago to visit the county of Elgin in the north of Scotland, he could not have failed to hear of the Earl of Moray's forest of Tarnaway, which then stretched for miles along the banks of a grand Highland stream—the Findhorn—in all the untrimmed luxuriance which he would have expected in going to wait on the duke in Arden. He would have been further surprised to hear of two brothers entirely realising the old ballad ideas of gallant young huntmen—superb figures, attired in the ancient dress of the country, and full of chivalric feeling—who, giving up the common pursuits of the world, spent most of their days in following the deer through this pathless wild. Men of an old time they seemed to be, of frames more robust than what belong to men now-a-days, and with a hardihood which appeared to make them superior to all personal exposure and fatigue. At the same time, they possessed cultivated minds, and no small skill in many of the most elegant accomplishments. These gentlemen have since made their names known in connection with works illustrating our national antiquities; and it is to them we are now indebted for the book by which we have been so pleasantly witch'd out of the sense of these dreary days. It is, in reality, a report of their Tarnaway life, brought forth when looked back to from a distant land and a tamer period of existence, but still glowing with unwonted fires, and suffused with the colours of a rich imagination.

The first volume is composed of romantic and sentimental poems, which will, we fear, be felt as heavy, and this simply because of the indistinctness of meaning and purpose which belongs to the greater part of them. And yet there are fine things here, as, for example, in the following fragment of an address from the elder to the younger brother on parting:—

— 'Sad for thee I sigh;  
Thou wert the loadstar of mine eye,  
Pleasant and ever true to me,  
Passing all maiden's constancy.  
Thou hast been woven in my heart  
Through every fibre's vital part;  
For on life's weary steep till now  
That we look downward from its brow,  
We shared in every care and gloe  
From childhood to maturity.  
I shaped thy toys in infant day,  
And skilled thy hand in mimic fray;  
Within my cloak at winter hour  
Oft fenced thee from the wind and shower,  
And oft the weary summer's day,  
When hot the sun, and long the way,

I held thy hand, and checked the stride  
Thy little footstep paced beside.  
Full often when the ford was deep  
I bore thee through the torrent's sweep;  
And oft to win the eagle's nest,  
Held fast the rope which bound thy breast,  
And when thy eager arm and grasp  
Too short the cuckoo's tree to clasp,  
Have lent my shoulder to thy foot,  
And borne thee upward from the root;  
Often I kept the orchard gap,  
Or shook the fruit into thy lap;  
And often at the twilight gray  
Held the fierce shepherd's dog at bay,  
While thou with willow brand and shield  
Routed the flock upon the field.

The days of youth have come and gone  
Like shadows on the dial stone;  
And manhood's sterner hour has brought  
Realities—for visioned thought.  
We've proved each toll and peril task  
Which childhood apes in idle mask. \* \*  
Thou'st fought beside me in the mell,  
Warded the brand in conflict fell,  
And when the dreadful day was lost,  
And I was 'numbed with wounds and frost,  
Thou bore me from the carnage fleet,  
Through fire and smoke and battle sleet.  
Thou'st seen the joys, the hopes of youth,  
Wane from my heart like maiden's truth;  
Through days of grief and nights of care,  
Watched by my couch, and kept my chair.  
In sickness, sorrow, and despair,  
And when my sad soul ebb'd away,  
Struck the sweet harp, and waked the lay,  
And stilled the trembling mortal strife,  
And called my spirit back to life.

Alas! that I should live to see  
The day that we should severed be,  
Should look upon the earth and air,  
The springing flower, the sunshine fair,  
Should have a joy, a pride, a care,  
And thou not near to soothe and share. \* \*

I stood where he had stood, and drew  
The sweet wood air as he should do,  
And trod his footsteps in the sand,  
And grasped the tree where leant his hand,  
And till mine eye could see no more,  
Gazed on the boat, the stream, the shore,  
The water he should ferry o'er,  
The lonely rock and clatch gray,  
Where he should land full many a day,  
When I was long and far away.  
I looked to heaven, and sun, and sky,  
The gray goshawk that hovered high,  
The dewy flower, the birken braid,  
And turned with broken heart away,  
That they could not—bird, flower, and tree—  
Look back and speak farewell to me:  
But they do speak, and make their mourn;  
The wren flits restlessly through the thorn,  
The linnet sits in greenwood still,  
The owl is silent on her bill,  
The gray hawk perches on the rock,  
Nor heeds below the cuckoo mock,  
And the buck bends his velvet ear,  
And wonders why he does not hear  
My wandering step and holla clear.

But I shall turn in happier hour  
To rock and stream, and tree and flower;  
The boughs shall bud, and the bloom shall spring,  
And the little bird in greenwood sing,  
And the owl shall cry upon the tree,  
The dun-deer bell upon the lea,  
And the gray hawk shriek to welcome me,  
And the sun shall shine on tree and tower,  
On bank and stream, on rock and flower,  
And all whereon I loved to see  
His blessed light shine merrily;  
And I shall sit thy board beside,  
And look upon thy arms of pride,  
And see thy trophies won the while,  
The antlers and the furry spoil;  
And sit beneath, and hear thee tell  
Of how they run, and where they fell.  
Oft shall we trace the foot again,  
By wood and stream, by hill and plain;  
And often in thy shallow light,  
Ferry the stream at morn and night.  
Oft couch upon the heather-bed,  
On the same mantle lay our head;  
And when the even light grows pale,  
Oft spread our meal upon the fail,  
Beneath the rock, beside the stream,  
And tell of this day as a dream.

So shall the dark years pass away,  
 And when at last our steps decay,  
 Upon the staff, ere day is done,  
 Still shall we totter to the sun;  
 And when we may not tread them more,  
 Look to the hill, and wood, and shore,  
 And gaze around on tree and flower,  
 Like travellers at parting hour.  
 And when shall come life's closing day,  
 And we from earth must pass away,  
 Near all that we have loved so deep,  
 Amid the heather we shall sleep,  
 Beneath the moss and lichen hoar,  
 Where often we have slept before,  
 Under our arm the fawn shall lie,  
 And o'er our head the owl shall cry,  
 And in the soft moss on our breast,  
 The wren and robin build their nest;  
 The hawk shall channer on the heath,  
 The wandering buck shall bell beneath;  
 And every year at turn of spring,  
 Where the gray oaks their branches swing,  
 The cuckoo o'er our bed shall sing,  
 There shall the wild rose shed her flower,  
 And the bat fly at evening hour;  
 And there the wood-dove make her moan,  
 And the bee wind about the stone,  
 And drink the dew, and suck the bell,  
 And there the lonely breeze shall tell  
 When sweetly tolls the vesper knell.

These are the words of nature in expressing one of her most beautiful feelings.

The second volume is wholly composed of prose notes, in which the popular attraction of the book chiefly resides. Here we find copious details concerning forest life and the craft of deer-hunting, together with many curious legends of the Highlands, and what is perhaps the most respectably useful thing in the work, many original observations on the habits of wild animals. The descriptions of the forest itself are of striking beauty and interest. 'Few knew what Tarnaway was in those days—almost untrodden, except by the deer, the roe, the foxes, and the pine-martins. Its green dells filled with lilies of the valley, its banks covered with wild hyacinths, primroses, and pyrolas, and its deep thickets clothed with every species of woodland luxuriance, in blossoms, grass, moss, and timber of every kind, growing with the magnificence and solitude of an aboriginal wilderness—a world of unknown beauty and silent loneliness, broken only by the sough of the pines, the hum of the water, the hoarse bell of the buck, the long wild cry of the fox, the shriek of the heron, or the strange mysterious tap of the northern woodpecker. For ten years we knew every dell, and bank, and thicket, and excepting the foresters and keepers, during the early part of that time we can only remember to have met two or three old wives who came to "crack sticks" or shear grass, and one old man to cut hazels for making baskets. If a new forester ventured into the deep bosom of the wood alone, it was a chance that, like one of King Arthur's errant-knights, he took a tree "to his host for that night," unless he might hear the roar of the Findhorn, and on reaching the banks, could follow its course out of the woods before the fall of light. One old wife, who had wandered for a day and a night, we discovered at the foot of a tree, where at last she had sat down in despair, like poor old Jenny Macintosh, who, venturing into the forest of Rothemurchas to gather pine-cones, never came out again. Three years afterwards, she was found sitting at the foot of a great pine, on the skirt of the Brae-riach, her wasted hands resting on her knees, and her head bent down upon her withered fingers. The tatters of her dress still clung to the dry bones like the lichen upon the old trees, except some shreds of her plaid, which were in the raven's nest on Craig-dhubh, and a lock of her gray hair that was under the young eagles in the cery of Loch-an-Eilean.

'If such danger had no real existence in Tarnaway, it was an appalling labyrinth to the simple muirland cotters, accustomed to no more foliage than a rowan-tree and a kail-stock, and who had no thought to guide themselves with the sun by day and the stars by

night. It had been otherwise in the old time, for Tarnaway was only the remnant of the vast expanse of wood which had stretched over the plains and braes of Moray, from Rothemurchas to the sea, and from the shaws of Elgin to the ancient oaks of Calder and Kilravoch. Enclosed, like Cadzow and Chillingham, out of the remains of the ancient British forests, within its range every species of native tree bore testimony of its aboriginal vigour. . . . Natural oaks and ash have shown a diameter of six feet, and shoots from the stools of the former have grown seven feet in the first year. There was an alder opposite to Shui which was eleven feet in circumference, and in other banks of the river grew birches from nine to twelve. In 1826, some of the forest roads and large tracks of the wild wood were avenues, and filled with the most beautiful beeches, equal, according to their growth, with the best of their contemporaries in Oxfordshire or Buckinghamshire. One approach to the castle was an alley of larches a mile in length, and of unrivalled magnificence; and many a secluded knoll in the depths of the forest was tufted by august spruces feathering into the grass, and exhibiting the richest foliage and most vigorous growth. It is probable that at this time Tarnaway was unequalled in Great Britain for the beauty, extent, and variety of its wood scenery. Its artificial productions, however, were less interesting than the remains of the mighty aboriginal pines, the oaks which had no doubt seen the Raid of Harlaw, and the gigantic hollies, which in some parts covered the "pots" and braes, and were not exceeded, perhaps not equalled, in Great Britain. Of the former there were a few, of which the largest were fourteen feet in girth, and of the latter many of the trunks were six feet in circumference, and supported a mass of foliage from fifteen to twenty feet in diameter, and so close, that the heaviest snow and driving rain never laid the dust at their feet. Many a storm have we sat out dry and warm under their green roofs, and often scared the humpbacked bucks and ruffled woodcocks, which ran covering before the drift, or dropped out of the blast to shelter where we had gone before them.'

Through this region and the neighbouring hills the two brothers pursued the deer for many a day. Sometimes they would lie abroad all night, waiting to renew the chase of some particular animal next day. Sometimes, to regain their home, they would cross the Findhorn under circumstances involving such peril, that, considering the frequency of the act, it is surprising that they escaped drowning. One of the things essential to such a life is to have deposits of refreshments concealed in various places throughout the wilderness, to which the hunter can resort when it suits his convenience. The brothers ultimately found it necessary to build a hunter's hut, in which themselves and their attendant could pass the night when occasion demanded. According to the description by the younger—'There is a high and beautiful crag at the crook of the river near the "Little\* Eas"—a precipice eighty feet in height, and then, like a vast stone helmet, crowned with a feathery plume of wood, which nodded over its brow. From its top you might drop a bullet into the pool below; but on the south side there is an accessible woody bank, down which, by planting your heels firmly in the soil, and among the roots of the trees, there is a descent to a deep but smooth and sandy ford. Upon the summit of the rock there is, or there was—my blessing upon it!—a thick and beautiful bird-cherry, which hung over the crag, and whose pendent branches taking root on the edge of the steep, shot up again like the banana, and formed a natural arbour and close trellis along the margin of the precipice.† Behind its little gallery there is a mighty holy, under which the snow rarely lies in winter, or the rain drops

\* Eas beag [Little Waterfall].

† The bird-cherry shoots vigorously in this kind of reproduction.



in summer. Beneath the shelter of this tree, and within the bank at its foot, I dug a little cell, large enough to hold two beds, a bench, a hearth, a table, and a "kistie." The sides were lined with deals well calked with moss, and the roof was constructed in the same manner, but covered with a tarpauling, which, lying in the slope of the surrounding bank, carried off any water which might descend from thaw or rain, and when the autumn trees shook off their leaves, could not be distinguished from the adjoining bank. Its door was on the brink of the crag, veiled by the thick bird-cherries on the edge of the precipice; and the entrance to the little path, which ascended from either side upon the brow of the rock, was concealed by a screen of birch and hazel, beneath which the banks were covered with primroses, wood-anemones, and forget-me-not. Bowers of honeysuckle and wild roses twined among the lower trees; and even in the tall pines above, the rose sometimes climbed to the very top, where all its blossoms clustering to the sun, hung in white tassels out of the dark-blue foliage. There the thrush and the blackbird sung at morning and evening, and the owl cried at night, and the buck belled upon the Torr. Blessed, wild, free, joyous dwelling, which we shall never see again!

Many adventures with the deer are recorded, some of them full of wild animation, and at the same time displaying the extraordinary sagacity of the animals. There is one story of a deer which, after being wounded, kept up a run till the third day, passing in this space of time over a large tract of country, and making many singular *treasons*, as the phrase is, in his attempts to escape. We have not room for any of these more lengthened narratives, interesting as they are, and must content ourselves with one which, in comparison, is little better than an anecdote, and yet is characteristic of the animal. 'One dark cloudy day, in the depth of winter, we followed a buck, which was like the German leg or the Wandering Jew, and took us all over the forest, into all the burns, and round all the lochs and heights, crossed through the middle of the castle park, down the road of the east farm, between the houses and the square, across the garden, and into the burn at its foot, where of course we lost him for a time. "Wonderful buck, sir!" said Donald; but "buck" only by conjecture: for whether buck, doe, or demon, we had never a glimpse of his head to say, and only judged his gander by the size of his slot and the wide spread of the dew-clees. With the burn he returned again into the forest, and only left the water, as we suppose, because he met an old woman's cow, which was standing up to her knees in the pool, where the long sweet grass grows down to the Glac-Luerach. From thence he went away over the pots to St John's Logie, treasured all over the wet woody bog, and into the brae of the Tober-shith. I made for the Giuthas-mòr, where a famous run comes up from the hollow, but the deep toll of the hounds passed along the middle of the bank, and went away for the river. I examined the slot, to see that it really had four legs, though, it is true, that was little satisfaction, since we have no authority that the fiend does not sometimes go on all-fours, as, according to the Arabians, he occasionally does on one. As long as the dogs led, however, we should certainly have followed, though he had as many legs as a millepede, or no more than a Nim-Juze. Where he went, however, or how we followed, it would be too tedious to relate. Keeping under the wind, we continually checked him by the cry of the dogs, until only old Dreadnought was left on the track, and at last the roe turned short in the face of a pass where I was posted before him, and took wild away for the hamlet of Ceann-na-Coille. This utterly threw me out, as there was no understanding such a buck—who, like Napoleon in Italy, left fortified posts on his flank, and otherwise disregarded the old pig-tailed rules of war—besides which, from his last direction, it was probable that he was a Brodie buck, and was gone straight away for his own woods. However,

I followed to hear what had become of him; and though I lost the cry of the hound, tracked the slot till it brought me out of the wood to a little cottage, where I found Dreadnought, very unlike himself, pottering about at the gavel of the house. I thought he was bewitched, till, as I traced the buck's foot, I also lost it near the same place, and neither he nor I, by nose or sight, could make any more of it than if, like one of Tasso's dragons, the buck had started into the air. While we were groping in the road, and Dreadnought taking a cast about the house, to the great discomfort of the old wife's cocks and hens, she brought out the usual cottage hospitality—the bowl of "set" milk; and as I was rewarding her with news of her cow, which she had lost for three days in the forest, and was the same "knock-kneed, how-backit, glaikit horned auld carline" which had turned the buck in the morning—there was a challenge from old Dreadnought in the kailyard! I threw the bowl into the barley-mow, and sprang upon the dike, where I saw the deep print of the buck's foot in the soft mould of the potato plot, into the middle of which he had bounded from the road, clearing the dike at a right angle, over which the dog had run, wondering where he had flown from his last slot. I had scarce time to observe the marks, when the hound opened at full cry, made a demi-tour into the wood, across the road, and into the thorn jungle on the burn; from which, as before mentioned, we had lost our buck of the three days' run. As, however, the roe was now tolerably fresh, I judged that, rather than follow the water into the open pines, he would return for the birken braes and thorny hollows behind him. To intercept him, therefore, I kept the flank of the stunted firs, which, straggling over the moss between the burn and the castle road, are the connecting cover between the jungle and the woods. I had just left the tall trees, and was making for the dike, when the cry of the dog turned towards me; in an instant after, and for the first time in the day, I saw the buck himself; he came bounding through the centre of the little scroggy firs, glanced over the road, and as he leaped upon the dike, the shot just caught him in the spring with which he topped the fall.

We conclude for the present with a picture of animated nature, which no common hand could have sketched. 'In the bedding season the does retire into the most secret thickets, or other lonely places, to produce their young, and cover them so carefully, that they are very rarely found; we have, however, deceived their vigilance. There was a solitary doe which lived in the hollow below the Braigh-cloiche-léithe in Tarnaway. I suppose that we had killed her "marrow;" but I was careful not to disturb her haunt, for she was very fat and round, stepped with much caution, and never went far to feed. Accordingly, when, at evening and morning, she came out to pick the sweet herbs at the foot of the brae, or by the little green well in its face, I trode softly out of her sight, and if I passed at noon, made a circuit from the black willows, or thick junipers, where she reposed during the heat. At last, one fine sunny morning I saw her come tripping out from her bower of young birches as light as a fairy, and very gay and "canty"—but so thin, nobody but an old acquaintance could have known her. For various mornings afterwards I saw her on the bank, but she was always restless and anxious—listening and searching the wind—trotting up and down—picking a leaf here and a leaf there, and after her short and unsettled meal, she would take a frisk-round-leap into the air—dart down into her secret bower—and appear no more until the twilight. In a few days, however, her excursions became a little more extended, generally to the terrace above the bank, but never out of sight of the thicket below. At length she ventured to a greater distance, and one day I stole down the brae among the birches. In the middle of the thicket there was a group of young trees growing out of a carpet of deep moss, which yielded like a down pillow. The prints of the doe's slender forked feet were thickly

tracked about the hollow, and in the centre there was a bed of the velvet "fog," which seemed a little higher than the rest, but so natural, that it would not have been noticed by any unaccustomed eye. I carefully lifted the green cushion, and under its veil, rolled close together, the head of each resting on the flank of the other, nestled two beautiful little kids, their large velvet ears laid smooth on their dappled necks, their spotted sides sleek and shining as satin, and their little delicate legs as slender as hazel wands, shod with tiny glossy shoes as smooth and black as ebony, while their large dark eyes looked at me out of the corners with a full, mild, quiet gaze, which had not yet learned to fear the hand of man: still, they had a nameless doubt which followed every motion of mine—their little limbs shrunk from my touch, and their velvet fur rose and fell quickly; but as I was about to replace the moss, one turned its head, lifted its sleek ears towards me, and licked my hand as I laid their soft mantle over them. I often saw them afterwards when they grew strong, and came abroad upon the brae, and frequently I called off old Dreadnought when he crossed their warm track. Upon these occasions he would stand and look at me with wonder—turn his head from side to side—snuff the ground again, to see if it was possible that he could be mistaken—and when he found that there was no disputing the scent, cock one ear at me with a keener inquiry, and seeing that I was in earnest, trot heavily onward with a sigh.

#### OUR COUSIN EPPY FORBES.

WE were on a visit to some friends, residing in a retired country town, when hearing of the eccentricities, or, more properly speaking, the peculiarities of an ancient lady, Miss Forbes by name, and comparing notes, we found that she was a cousin of our own. This relationship, indeed, was thrice removed; but according to Scotch computation, that is no very distant degree: so we determined to seek her out, and gain admittance to her domicile; a mark of favour not always vouchsafed to the many, the value of the privilege being of course enhanced to the favoured few. After more than one failure, our repeated summons, both with knocker and bell, being unheeded or unheard, we at length succeeded in introducing ourselves. Miss Forbes inhabited an old dingy-looking house, situated on the further hill-side, beyond the precincts of the town; it was several storeys high, tall and thin, and bare of windows towards the highway; and we understood that she had never crossed the threshold for the last twenty years, except to attend divine service in a neighbouring church twice on each Sabbath day. We were, moreover, informed that, since the death of her old servant, she retained no regular domestic, but always slept fearlessly in the habitation alone; her wants being attended to each morning, as the case might require, by a young girl, who gladly performed the simple offices required; for although Cousin Elspeth, or, as she was familiarly called, Eppy, was not reputed to be wealthy, but, on the contrary, was known to possess a very slender competence, yet the half of that she divided with those who were poorer, and needed help.

The door was opened by a stout upright old lady, very much scarred and disfigured in the face by the smallpox. On listening to our errand, and producing our credentials, Miss Forbes—for it was she—requested us to walk into the parlour and be seated. We really felt half abashed in the presence of this lone woman, for the simple dignity and calm courtesy of her bearing, old-fashioned and quaint though it was, repelled anything like familiarity or undue curiosity; whilst kindness unfeigned, and an innocent truthfulness, which

evidently came from the heart, disarmed all wish, if such a wish existed for a moment, to turn her into ridicule.

After our pretensions to relationship had been freely discussed, and frankly admitted by the old lady, she produced refreshments of the most primitive order from an adjoining closet, inviting us to partake of them, and the breezy air on the hill-side had such an appetising effect, that we did ample justice to the wheaten loaf; but when our entertainer arose to leave the room, taking in her hand a vase of the classic shape, which, we are given to understand, the Pompeian damsels used to carry water in, and which Cousin Eppy designed for the same purpose, we insisted on performing the office for ourselves. But with a soft and gingerly step, and an air as dignified as that of some fabled princess, she courteously waved her hand for us to resume our seat, and swam out of the apartment, returning in about five minutes with the vase filled to the brim with sparkling ready-iced delicious nectar, eagerly quaffed by thirsty, dusty, matter-of-fact mortals. And yet, notwithstanding her hospitality and kindness, we intuitively felt that all attempts on our part to converse intimately as relatives were met with good-breeding, it is true, but also with an impassable barrier of self-withdrawal: so we readily accepted Cousin Eppy's invitation to take a turn in the garden, looking about us, nevertheless, in gratification of our curiosity, as much as circumstances permitted.

The reception parlour had literally nothing in it save a few high-backed antique chairs and a table; and in the small room leading into the garden (Cousin Eppy's own sanctum), in addition to the same articles of furniture, there was a Bible and Prayer-Book; but no sign of feminine occupation; no books save the best; no nick-nacks or nonsense of any description. We heard the regular monotonous tick of the clock, but we looked in vain for a cat to enliven the scene with its companionable purr; and I speedily found myself picturing the long winter evenings of the past twenty years, passed alone, without books, without conversation, interest, or occupation.

By and by I endeavoured to frame a romance, with all its adjuncts, as pertaining to our cousin's history; but when I looked on the old lady's countenance, and conjectured at what epoch of her life the puckering and seams had thus disfigured it, and when I learnt that she was only ten years of age when attacked by the virulent enemy which had left its mark behind, I no longer succeeded in fancying her the heroine of a bygone tale of sentiment, wherein celibacy and a love of solitude originated in the somewhat commonplace episode of disappointed affections.

The garden—if garden it might be designated, when its aspect was that of waste land, with long coarse grass luxuriantly waving, and wild rose-trees scattered about—lay on the hill-side, open and airy; a broad gravelled walk or terrace ran along the high part, while the domain was bounded by a row of hardy Scotch firs, whose stems were entwined with rich masses of honeysuckle, the summer bloom and sweet odours contrasting strongly with the wintry savage foliage of the dark evergreens. On this terrace, Cousin Eppy informed us, it had been her custom to promenade for at least three hours, during some portion of each day, for the last twenty years, leisurely sauntering up and down, shaded by her huge green parasol from the summer's heat and glare, and protected by a capacious muff from the winter's frost and cold. The view from this terrace,

which had a southern aspect, was a lovely and extensive one, far away over hill and plain; and in the distance, just peeping and glittering between the hills, the sea, the 'deep blue sea,' was discernible, with now and then the snowy sails of some passing bark, on which a ray of sunshine rested—the only moving object in the solitary scene. Here, too, half-hidden by eglantine and wild creepers, midway down the ascent, we found the fairy spring which had afforded us such refreshing beverage; the water gushed gently up into a small rounded basin, and from thence trickled away unseen beneath the profuse underwood of Cousin Eppy's neglected pleasure-grounds.

I longed to ask this strange antiquated cousin *how* she passed her time?—how she reckoned up the innumerable days which had glided by?—what her memories were, and what her hopes or anticipations? Was she devoted to contemplation, or was it the mere apathetic indulgence of a misanthropic disposition, joined to eccentric habits and whims? After-circumstances, indeed, proved that there was no mystery to be solved; for the time arrived when I enjoyed close and frequent communion with Eppy Forbes, and after a lengthened period had elapsed, her confidence and friendship; which latter marks of favour had been so sparingly dispensed by her during her long pilgrimage, that I felt myself especially honoured in possessing them.

She had been transplanted from her native Highland home at an early age, to fulfil the duties of companion and humble friend to a noble lady, with whom she had continued to reside after the latter's marriage with Lord Annesley. It was surmised that ties of 'blood-relationship' existed between the impoverished Scotch family and the wealthy English one from intermarriages long ago. Be that as it might, after more than twenty years' devoted attendance on her lady, ten of which were passed in a sick-room, tending the heroic and gentle sufferer, who at length breathed her last in Eppy's arms, she was installed as housekeeper at Annesley Park, which became a deserted mansion after Lady Annesley's death, and the situation, consequently, was considered a sinecure. Here Eppy passed ten more years of loneliness, amidst tapestried desolation and mouldering grandeur, happy in occasionally receiving tidings of her dear young lady, the only child of her late lamented mistress; but whenever Eppy came to this part of her reminiscences, she always spoke in a half-whispering mysterious manner, just as if, by so doing, she concealed what the world knew full well—namely, the sad history of the fair Maude Annesley, whose ill-assorted union and early death formed the one engrossing theme of poor Eppy's life, although she rarely indulged herself in *speaking* of it, and then with deep solemnity. She communed with her own heart silently in her chamber, and was still.

On Lord Annesley's decease, Eppy was removed from Annesley Park, and a small annuity being conferred upon her, together with the freehold on the hill-side, Eppy considered that she was permanently settled for the remainder of her days; and, as already mentioned, she had never quitted her home, save for the purposes of devotion, during twenty years occupancy.

It seemed Eppy Forbes's fate to pass her life amid scenes of suffering and solitude; and when trouble fell heavily on her noble patron, it fell heavily on Eppy's heart also, and caused 'her sun of life to set,' to use her own poetical expression. And she used to say, having once associated with the great, the good, and the learned, how was it possible she could bear to mix in inferior society? She could feel no new interests, and what to her were the petty concerns and gossipings of the little world around? No: she rose at six every morning, read her Bible, and performed her religious exercises, breakfasted, attended to her simple domestic concerns, received her poor patients—for Eppy was somewhat of a quack, though well skilled in the use of medicinal herbs—walked on her terrace and *sniffed the sea-breeze*,

dined early and frugally, read her Bible again, walked again on her terrace, took a great many cups of tea, walked again, and read the 'Best Book,' and finally ascended to her 'observatory'—one of the empty rooms at the top of the house, from whence she made her own primitive observations, and still more extraordinary calculations concerning the heavenly bodies: in short, Eppy had invented an astronomical code of her own. In this 'observatory' she passed many peaceful and happy hours, far removed from earthly cares, pomps, and vanities; and though her usual hour of retiring to rest was at nine o'clock punctually, yet a cloudless starry night often enticed her to commit the dissipation of late hours.

There was one little episode during her long and passionless career which probably was as full of sentiment and interest to Eppy Forbes as a cherished remembrance of deep and sad import to others differently circumstanced. The good old lady would blush on repeating her simple narrative, and use her large fan, not without having frequent recourse to a bottle of pungent smelling salts. It was as follows:—One of the very few journeys she had ever performed was on her removal to Annesley Park, situated in a remote part of England. She travelled in a stage-coach, and the fellow-traveller who shared the inside with her was, as Eppy described him, 'a comely, fresh-coloured, elderly gentleman, who, she thought, must be a law practitioner, from the nice way in which he spoke, and also because he had a large blue bag with him.'

Eppy was a timid traveller, the road was hilly, and the coach was a fast one; but the pleasant gentleman with the blue bag reminded her that it was always the safest plan to sit quite still, with the arms kept close to the sides, to prevent their being broken, should an accident occur. Soon after enforcing this prudent and excellent advice, which Eppy scrupulously followed, there was a sudden crash, and the coach overturned. The inmates happily escaped unhurt, but poor Eppy's terror was of course excessive. Her fellow-traveller was extricated first, and then she heard his friendly voice exclaiming, 'Give me your hand, madam; gently—gently. I hope you are not hurt. There—step lower, madam. Don't be afraid—you are all safe now!' The accident had happened within a mile or two of the nearest town, and in the midst of a beautiful wooded valley, and the passengers walked forward to wait until another conveyance should be in readiness. 'And only imagine my feelings,' Eppy added in a softened tone, 'when my amiable fellow-traveller, escorting me along the highway, smilingly asked if I knew by what means I had descended with so much ease from the topsyturvy coach! I did indeed remember stepping on *something*; and never have I ceased to cherish the remembrance of so chivalrous an act. "Ah, madam," said this gallant knight, "your fairy feet rested for a moment on the knee of your humble servant, who, kneeling on the other, thus performed a page's duty, most happy in being able to tender his poor services!" I could not express my thanks, for I was perfectly overcome; and though I never heard of him again, or learnt who he was, yet had I ever married, I would have desired that my husband might closely resemble this charming individual.'

Worthy, simple, true-hearted Cousin Eppy! She passed away as calmly as she had lived, after only a few days' illness; and there came into my possession a small cabinet picture, the dearest hoarded treasure of her life, and which I succeeded in restoring to those who value it as an inestimable relic. It represents a bright happy-looking girl, with laughing blue eyes and waving sunny locks; and *this* was the resemblance of the fair Maude Annesley, who had died, it was said, of a broken heart ere the auburn ringlets turned to gray, or the snowy brow betrayed a line. As Eppy herself often used to remark, when gazing on that picture, 'it was an owre true lesson on the instability and perishing nature of earthly happiness and grandeur,' uncon-

sciously quoting the words of St Pierre, that 'Could we allow ourselves to be persuaded that there was no such thing as a future life, how many sorrows would remain without consolation!'

### MISCHIEVOUS SCHOOLBOYS.

We perceive an amusing and not uninteresting article on 'Mischievous Boys' in the Glasgow Trainer's Monthly Record. The writer thinks that mischievous schoolboys have never had justice done them—they are called 'good-for-nothing young rascals,' whereas they are good for something, if teachers and parents only knew how to draw the good out of them. The true way of going to work with boisterous overbearing boys is to divert their energies into some useful channel; severity of discipline is unavailing, and perhaps only makes bad worse. We shall extract a few passages on the subject.

'Many melancholy examples might be given of the serious effects of [school] mismanagement of this kind on the after-life of some of the most gifted men our country's science and literature can boast. Punishment may coerce the tongue into silence, it may pinion the outward conduct, but the inward is beyond its power. The very force that squares the external actions by a series of compressions, stirs up rebellion within, excites the busy workings of the heart to belie the arm and the tongue, it encourages the constant frown, it educates the secret determination of revenge; it trains to a continuous sullen obstinacy of character, and not unfrequently converts the generous and openly mischievous boy into that most hopeless of all characters—the doggedly and sneakily mischievous.'

'The recollections of every one will readily furnish many examples of the conflict here referred to, as maintained between the mischievous boy and the master. Have you ever seen, reader, such a boy, charged with faults in which he had no share, refusing either to plead guilty himself or to criminate others, standing calm and collected in the midst of a school of sympathising faces, before a teacher enraged, and helpless because enraged? Do you not remember, as lash after lash fell brutally on the boy's head or hand, and he struggled with the heroism of a martyr to keep back the tear that was forcing itself into shape in his eye, how every scholar felt as if he could spring upon the master and bear him to the earth? Never did this boy, the victim of the master's wrath, stand out so boldly as an example to the school. The master rendered this very punishment the means of greater mischief than ever the boy wrought; the scholars loved the one, and hated the other; and deservedly did they hate him.'

'Far be it from me to look lightly on the conduct of the mischievous boy, or to attempt to extenuate his errors. All that I plead for is, that an effort be made to understand his character; that it be analysed and examined without prejudice, and with the sole desire of his good; and that when the ruling principle of his moral nature has been discovered, and separated from the others, it be mildly, yet firmly guided into healthful exercise. If he is fond of power, for example, let him have charge of some of the playground amusements, and the importance of his office will lessen the boisterousness of his manners. If he is fond of combinations, and causes incessant confusion, by arranging, in the intervals of school exercise, copies, or slates, or forms, after some newfangled methods of his own—the summary infliction of punishment, if he happens to be caught in the midst of his arrangements, will do no good; it will only drive him to seek, in less innocent, because more hidden amusement, the morbid gratifications arising from the muscular and intellectual exercise of his favourite pursuits. Let him have charge of the mechanical economy of the school, and have carefully shown him the order of everything, and I venture to affirm that not even a pen will be allowed to remain out of its place. It is unnecessary to multiply hints like these.'

'When he is gratified in this way, and won to the master's side—when the teacher has thus thrown himself into the spirit of the boy, he can mould, and direct, and restrain at will this excessive love of power. When the moral character is thus led, the boy works cheerfully, his ruling intellectual faculty soon discovers itself, and the master is enabled to strengthen those other faculties that would lie unexercised, on account of the unvarying gratification furnished by the one class of favourite intellectual pursuits. By a simple, forbearing method of this kind, the openly mischievous boy, the "thorn in the school,"

"the plague of the master's life," may become one of the most powerful and pleasant instruments in his hand for the regulation of others; and a mind that would have been withered or gnarled by a dignified, unbending Dombey-like chilliness, may *bourgeois* and blossom, and become richly laden with fruit.'

### DOMESTIC HAPPINESS.

Ah! what so refreshing, so soothing, so satisfying, as the placid joys of home! See the traveller—does duty call him for a season to leave his beloved circle? The image of his earthly happiness continues vivid in his remembrance, it quickens him to diligence, it makes him hail the hour which sees his purpose accomplished, and his face turned towards home; it communes with him as he journeys, and he hears the promise which causes him to hope—'Thou shalt know also that thy tabernacle shall be in peace, and thou shalt visit thy tabernacle, and not sin.' On the joyful reunion of a divided family—the pleasures of renewed interview and conversation after days of absence! Behold the man of science—he drops the laborious and painful research—closes his volume—smooths his wrinkled brow—leaves his study, and unbending himself, stoops to the capacities, yields to the wishes, and mingles with the diversions of his children. Take the man of trade—what reconciles him to the toil of business?—what enables him to endure the fastidiousness and impertinence of customers?—what rewards him for so many hours of tedious confinement? By and by the season of intercourse will behold the desire of his eyes and the children of his love, for whom he resigns his ease; and in their welfare and smiles he will find his recompense. Yonder comes the labourer—he has borne the burden and heat of the day—the descending sun has released him of his toil, and he is hastening home to enjoy repose. Half-way down the lane, by the side of which stands his cottage, his children run to meet him. One he carries, and one he leads. The companion of his humble life is ready to furnish him with his plain repast. See his toil-worn countenance assume an air of cheerfulness! His hardships are forgotten—fatigue vanishes—the cats, and is satisfied. The evening fair, he walks with uncovered head around his garden—enters again, and retires to rest; and 'the rest of a labouring man is sweet, whether he eat little or much.' Inhabitant of this lowly dwelling, who can be indifferent to thy comfort? Peace be to this house!—*Rev. W. Jay.*

### TELEGRAPH.

There is a telegraphic line between Newhaven and Toronto, in Upper Canada, the route being via New York, Albany, Rochester, Buffalo, then crossing the Niagara river, below the Falls, and passing round Lake Ontario to Toronto—the entire distance of which is *nine hundred miles*! This is the longest distance yet traversed by electricity in a continuous, unbroken line.

### ARITHMETICAL AND MATHEMATICAL WORKS.

W. and R. CHAMBERS have now completed their series of Arithmetical and Mathematical Treatises for use in schools, or for private instruction, as follows:—

Introduction to Arithmetic,	1s	6d
Arithmetic, Advanced Treatise,	2s	6d
Algebra,	4s	6d
Key to Algebra,	2s	6d
Plane Geometry of Euclid, as improved by Simson,		
Playfair, and Bell,	2s	6d
Key to Plane Geometry,	2s	6d
Solid and Spherical Geometry,	2s	6d
Practical Mathematics, two Parts, each	4s	6d
Key to Practical Mathematics,	2s	6d
Mathematical Tables,	3s	6d

The foregoing is respectfully offered as a carefully-prepared series of elementary works on Arithmetic and Mathematics. The *PLANE GEOMETRY* has now been published ten years, during which period, from its remarkable cheapness and adaptation to the purposes of education, nearly sixty thousand copies have been sold. To render the work still more deserving of public approbation, a new edition, typographically and otherwise improved, has just been issued.

\* \* \* Sold by all Booksellers.

Published by W. & R. CHAMBERS, High Street, Edinburgh. Also sold by D. CHAMBERS, 20 Miller Street, Glasgow; W. B. Orr, 147 Strand, London; and J. M'GLASSAN, 21 D'Olier Street, Dublin.—Printed by W. and R. CHAMBERS, Edinburgh.



